

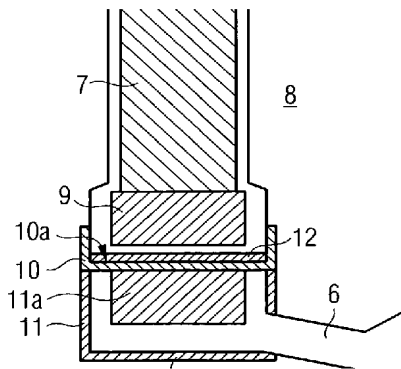
**REMARKS**

Reconsideration and allowance are respectfully requested. Claims 1-9 and 11-13 remain pending, wherein claims 1, 6, 8, and 11-13 are amended.

Claims 1-8 and 11-13 are rejected for indefiniteness under 35 U.S.C. § 112, second paragraph. Although this ground of rejection is respectfully traversed, the claims are amended to address the issues identified in the Office Action, and accordingly withdrawal of this rejection is respectfully requested.

Claims 1-9 and 11-13 are rejected for anticipation under 35 U.S.C. § 102(b) in view of U.S. Patent No. 5,918,470 to Xu et al. ("Xu"). This ground of rejection is respectfully traversed.

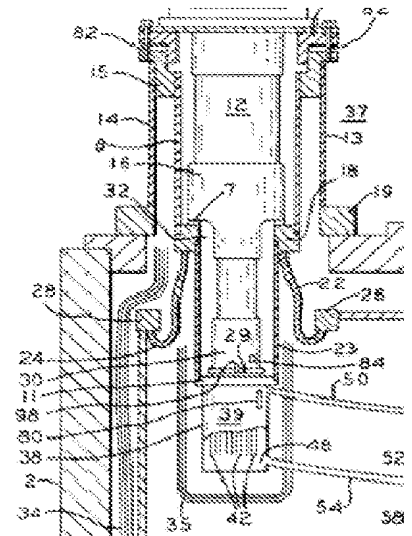
Independent claim 1 is amended to clarify that the thermal interface, which consists of a gas, "is the exclusive thermal interface between the refrigerator and the wall of the closed recondensing chamber." An example of this can be seen in FIG. 2 of the present application (a portion of which is reproduced below), which the present application describes as illustrating that "[c]ooling stage 9 ... does not make mechanical contact with base 10"<sup>1</sup> and that "[l]iquid cryogen 12 and its gaseous counterpart provide a non-contact ('recondenser') thermal interface between cooling stage 9 and base 10."<sup>2</sup> This feature is not disclosed by Xu.



<sup>1</sup> Page 5, line 22 of the Substitute Specification.

<sup>2</sup> Page 6, lines 6-8 of the Substitute Specification.

The Office Action cites “gas inside of cavity 32” as corresponding to the claimed thermal interface. For at least the reasons set forth in the Reply filed on August 1, 2011, it is respectfully submitted that this is not a proper interpretation of the disclosure of Xu in view of Applicants’ claims. Nevertheless, as illustrated in FIG. 1 of Xu (a portion of which is reproduced on the right), Xu discloses that in addition to “gas inside of cavity 32”, gasket 29 is a “thermal interface.”<sup>3</sup> Accordingly, under the interpretation of Xu provided by the Office Action, the thermal interface would include both “gas inside of cavity 32 and gasket 29. In contrast, amended claim 1 recites that the thermal interface, which consists of a gas, “is the exclusive thermal interface between the refrigerator and the wall of the closed recondensing chamber.” Thus, Xu does not anticipate claim 1.



All of the independent claims are amended to include similar features to those discussed above with regard to claim 1 and are patentably distinguishable over Xu for similar reasons.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323, Docket No. 038817.58287US.

Respectfully submitted,

December 21, 2011

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<sup>3</sup> Xu at column 4, lines 10-14.